Measurements and Conversions

The following information is provided to assist the reader in understanding certain concepts in this document.

Units of Measurement

Most measurements in this report are presented in English units. Metric units are also used for measurements that are too small to be defined by English units or with data that were intended to be presented in metric units. Many metric measurements in this volume include prefixes that denote a multiplication factor that is applied to the base standard (for example, 1 centimeter = 0.01 meter). Table MC-1 presents these metric prefixes. Table MC-2 lists the mathematical values or formulas needed for conversion between metric and English units.

Table MC–1. Metric Prefixes

Prefix	Symbol	Multiplication Factor
deci	d	$0.1 = 10^{-1}$
centi	c	$0.01 = 10^{-2}$
milli	m	$0.001 = 10^{-3}$
micro	µ	$0.000\ 001 = 10^{-6}$
nano	n	$0.000\ 000\ 001 = 10^{-9}$
pico	p	$0.000\ 000\ 000\ 001 = 10^{-12}$

Table MC–2. Metric Conversion Chart

To Convert To Metric			To Convert From Metric		
If You Know	**Multiply By**	**To Get**	**If You Know**	**Multiply By**	**To Get**
Length					
inches	2.54	centimeters	centimeters	0.3937	inches
feet	0.3048	meters	meters	3.281	feet
miles	1.60934	kilometers	kilometers	0.6214	miles
Area					
square feet	0.092903	square meters	square meters	10.7639	square feet
square miles	2.58999	square kilometers	square kilometers	0.3861	square miles
Volume					
gallons	3.7854	liters	liters	0.26417	gallons
Temperature					
Fahrenheit	Subtract 32 then multiply by 5/9ths	Celsius	Celsius	Multiply by 9/5ths then add 32	Fahrenheit
Mass					
tons (U.S.)	0.907	metric tons	metric tons	1.10	tons (U.S.)

Rounding

Some numbers have been rounded; therefore, sums and products throughout the document may not be consistent. A number was rounded only after all calculations using that number had been made. Numbers that are actual measurements were not rounded.

Scientific Notation

Scientific notation is based on the use of positive and negative powers of 10. A number written in scientific notation is expressed as the product of a number between 1 and 10 and a positive or negative power of 10.

Examples: 5,000 would be written as 5×10^{3} or 5E+3
0.005 would be written as 5×10^{-3} or 5E-3

Numbering Conventions

The following conventions were used for presenting numbers in the EIS text and tables:

- Numbers larger than 1 are expressed as whole numbers.
- Numbers between 10^{-1} and 10^{-2} are expressed in decimal form.

  Examples: 5×10^{-1} is expressed as 0.5
  5×10^{-2} is expressed as 0.05

- Numbers smaller than 10^{-3} are expressed in scientific notation.